

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* MICHAEL J. TESSMER and ROBERT D. CHRISTIANSEN

---

Appeal 2007-1466  
Application 10/671,893  
Technology Center 3700

---

Decided: August 15, 2007

---

Before WILLIAM F. PATE, III, JENNIFER D. BAHR, and LINDA E. HORNER,  
*Administrative Patent Judges.*

Opinion by HORNER, *Administrative Patent Judge.*

Dissenting opinion by PATE, *Administrative Patent Judge.*

DECISION ON APPEAL

## STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the final rejection of claims 1-5<sup>1</sup>. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF DECISION

We REVERSE.

## THE INVENTION

The Appellants' claimed invention is to a pressurized, water-soluble pouch (Specification 8:1). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A container for a product intended for dissolution in a liquid, comprising:
  - a sealed pouch made of a material that is soluble in said liquid;
  - a product contained in the pouch; and
  - a gas contained in the pouch in sufficient quantity to cause the pouch to be resilient at ambient conditions, wherein said gas is pressurized to at least 1-2 psig.

---

<sup>1</sup> Claim 6 has been canceled and claims 7-16 have been withdrawn from consideration.

### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Adelberg	US 6,451,590 B1	Sep. 17, 2002
Alexandre Catlin	US 2002/0169092 A1	Nov. 14, 2002

The Appellants seek our review of the final rejection of claims 1-5 under 35 U.S.C. § 103(a) as unpatentable over Catlin in view of Adelberg.

### ISSUE

The issue before us is whether the Appellants have shown that the Examiner erred in determining that one having ordinary skill in the art would have been led to the claimed invention based on the teachings of Catlin and Adelberg. In particular, the issue focuses on whether one having ordinary skill in the art would have had a reason to add pressurized gas to the pouch of Catlin.

### FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427, 7 USPQ2d 1152, 1156 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Catlin discloses a water soluble multi-compartment pouch containing a cleaning composition for release on dissolution of the pouch and adapted to fit in the dishwasher dispenser of a dishwashing machine (Catlin 1:¶0001).

2. Catlin discloses that for reasons of deformability and dispenser fit under compression forces, pouches or pouch compartments containing a component which is liquid will usually contain an air bubble having a volume of 50% or less of the volume space of the compartment (Catlin 8:¶0093).
3. Catlin further teaches that this air bubble can reduce the compressibility of the pouch and thus can reduce the ease of closing the dispenser after placing the pouch therein, and that the ease of closing is increased when the ratio of the air bubble diameter to the maximum lateral dimension of the pouch footprint is from about 1:5 to about 1:2 (Catlin 15:¶0181).
4. Adelberg discloses a plant propagation apparatus having a disposable sealed transparent enclosure (Adelberg, col. 2, ll. 59-60).
5. Adelberg discloses that the enclosure is configured to receive gas on its inner space to generate pressure to a predetermined level to afford to the enclosure a flexible mechanical resistance (Adelberg, col. 3, ll. 34-37 and 49-51).
6. Adelberg discloses that the enclosure is adapted to assume a volume and shape that is supportive of vertical growth of the living plant material and is adapted to facilitate shipping and transport of the enclosure in packed boxes or crates (Adelberg, col. 3, ll. 51-55).

## PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007).

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

In *KSR*, the Supreme Court explained, “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41, 82 USPQ2d at 1396. The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.*, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory

statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). The Supreme Court recognized, however, that “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1395 (citing *United States v. Adams*, 383 U.S. 39, 51-52 (1966)).

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.

*In re Gurley*, 27 F.3d 551, 552-53, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994) (citations omitted). “The prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed in the ... application.” *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). “The fact that the motivating benefit comes at the expense of another benefit, ... should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.” *Winner Int'l*.

Appeal 2007-1466  
Application 10/671,893

*Royalty Corp. v. Wang*, 202 F.3d 1340, 1349, n. 8, 53 USPQ2d 1580, 1587, n. 8 (Fed. Cir. 2000).

## ANALYSIS

The Examiner found that Catlin discloses a container as claimed having a gas contained in the pouch in sufficient quantity to cause the pouch to be resilient at ambient conditions and reduce the compressibility of the pouch (Answer 3).

The Examiner found that Catlin does not disclose, however, that the air is pressurized (*Id.*). The Examiner found that Adelberg teaches that it is desirable to introduce pressurized gas into pouches to afford to the pouch a flexible mechanical resistance to better protect the product held therein. (*Id.*) Therefore, the Examiner determined that it would have been obvious to provide pressurized gas to the pouch of Catlin, as taught by Adelberg, to afford to the pouch a flexible mechanical resistance to better protect the product held therein. (*Id.*)

The Appellants contend that one of ordinary skill would have had no motivation to pressurize the pouches of Catlin as taught by Adelberg because the pouches of Adelberg are intended to accommodate fragile living organisms, whereas the pouches of Catlin contain inanimate substances (Appeal Br. 5). The Appellants also contend that Catlin teaches away from the combination, because Catlin's pouch is designed to be used in a dishwasher dispenser, and thus Catlin does not wish to have the compressibility of the pouch reduced by adding pressurized gas (Appeal Br. 5). We agree with the Appellants.

Catlin discloses a water soluble multi-compartment pouch for use in a dishwasher dispenser (Finding of Fact 1). Catlin teaches that although the pouch may contain an air bubble, it is important for the air bubble to fill only 50% or less of the volume of the pouch so that the pouch will be able to deform sufficiently to fit in the dispenser (Finding of Fact 2). Catlin further teaches that the air bubble can reduce compressibility of the pouch and thus negatively impact the ease of closing the dispenser (Finding of Fact 3).

Adelberg discloses a plant propagation apparatus having a disposable sealed transparent enclosure (Finding of Fact 4). Adelberg teaches inserting a pressurized gas inside the enclosure to give mechanical resistance to the enclosure to support vertical growth of the plants in the enclosure and to protect the plants during shipping and transport (Findings of Fact 5-6).

We see no apparent reason why one having ordinary skill in the art at the time of the invention would have modified Catlin to use pressurized gas inside the pouch. In fact, Catlin clearly discourages one from adding pressurized gas in its pouch because the pressurized gas would reduce the compressibility of the pouch so that the pouch would not be able to deform sufficiently to fit in the dishwasher dispenser (Findings of Fact 2-3). This is a clear teaching away from adding pressurized gas to Catlin's pouch. Further, Adelberg teaches to add the pressurized gas to its enclosure to protect the fragile plants therein and to provide space for their growth (Findings of Fact 5-6). One having ordinary skill in the art would have had no motivation to apply the teaching of Adelberg to add pressurized gas to the pouch of Catlin, because the contents of Catlin's pouch are not fragile and do



not require room for vertical growth. On the contrary, Catlin's pouch has need of compressibility, not mechanical resistance, in order to deform sufficiently to fit within the dispenser.

The dissent would have affirmed the Examiner's finding of obviousness based on the teachings of Catlin alone. We agree with the dissent that Catlin is silent as to the pressure of the air bubble within the container. We disagree, however, with the dissent's reasoning, based on *KSR*, that one of ordinary skill would have had good reason to pursue the overpressure option which was in his or her technical grasp. The passage of *KSR* relied upon by the dissent requires "a design need or market pressure to solve a problem." 127 S.Ct. at 1742, 82 USPQ2d at 1397. We find no design need or market pressure to solve a problem in the prior art that would have led one having ordinary skill in the art to the claimed pressurized pouch. Rather, for the reasons stated *supra*, Catlin provides a design need, i.e., compressibility, that would have led one having ordinary skill in the art away from adding pressurized air to its pouch. For these reasons, we do not sustain the Examiner's rejection of claims 1-5 as unpatentable over Catlin and Adelberg.

#### CONCLUSIONS OF LAW

We conclude that the Appellants have shown that the Examiner erred in rejecting claims 1-5 under 35 U.S.C. § 103(a) as unpatentable over Catlin and Adelberg.

Appeal 2007-1466  
Application 10/671,893

## DECISION

The decision of the Examiner to reject claims 1-5 is reversed.

## REVERSED

## DISSENTING OPINION

WILLIAM F. PATE, III, *Administrative Patent Judge, dissenting.*

I respectfully dissent.

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

*KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1397 (2007).

It is my view that the Catlin published application would have rendered the subject matter of Appellants' independent claim 1 *prima facie* obvious at the time the invention was made.

I concur in my colleagues' findings with respect to the Catlin disclosure. To those findings I merely add two more. One, the amount of overpressure claimed by Appellants is exceedingly modest. Only 1 psig of overpressure in the claimed soluble container brings subject matter under the scope of Appellants' claims.

My second additional finding is that, given the Catlin disclosure of a bubble in the soluble pouch of the Catlin invention, there are only three possible identified, predictable solutions to the pressure of air or gas in the bubble. The gas may be at a lower pressure than ambient conditions. It may be at substantially the same pressure as the surrounding atmosphere, i.e., at ambient conditions. Or the pressure in the bubble may well be at pressure greater than ambient conditions.

We may immediately discard the first of these identified predictable solutions, inasmuch as a bubble at lower pressure would let the atmosphere and the ingredients of the pouch define the shape of the container rather than the ingredients and the bubble. One goal of Catlin is excellent aesthetics (Catlin 1:¶0008).

So we are thus left with only two identified, predictable solutions to the problem of the exact pressure of the bubble formed in the pouch disclosed by Catlin. It is my conviction that the bubble disclosed in Catlin is at a pressure somewhat greater than ambient conditions, but Catlin is silent with respect thereto. However, given that there are only two predictable solutions, and given that the amount of overpressure claimed is extremely modest, one of ordinary skill would have had good reason to pursue the overpressure option which was in his or her technical grasp. Thus, in my view, one of ordinary skill would have found the

Appeal 2007-1466  
Application 10/671,893

subject matter of Appellants' claim 1 prima facie obvious at the time the invention was made.

Accordingly, while my colleagues may chide me that there is a lack of evidence in Catlin to support a rejection under § 103, I will gently chide them for refusing to give the Supreme Court's decision in *KSR* its full scope.

JRG

QUARLES & BRADY LLP  
ONE SOUTH CHURCH AVENUE, SUITE 1700  
TUCSON, AZ 85701-1621